

Amended Claims

1. A plastic screw cap (1) for screwing onto a thread on
a bottle neck (11) of a bottle (13) made of glass or
5 plastic, comprising a cap bottom (3) and connected
thereto a cylindrical cap envelope (5), at an inner side
the cap envelope of [which] a screw thread (7) is formed for engagement
with the thread of the bottle neck (11); a closure
membrane (37) supported on the cap bottom (3) by at
10 least one circumferential resilient spacer (31) that can
rest on the membrane opposite a top face (33) of the
bottle neck (11); characterized in that a sealing lip
(19) is formed radially outwards of the spacer (31) and
concentric thereto on the cap bottom (3) and can rest on
15 the closure membrane (37), and in that the cap bottom
(3) comprises, at least in a zone (S_1) lateral to a root
(29) of the sealing lip (19), a region of reduced
thickness that forms an elastic zone and defining a
groove (28) for temporarily receiving a part of the
20 closure membrane (37) when the pressure within the
bottle (13) is increased.

2. A screw cap according to Claim 1, characterized in
that regions of reduced thickness are formed in the cap
25 bottom (3) bilaterally of the root (29) of the sealing
lip (19)..

3. A screw cap according to any one of Claims 1 or 2,
characterized in that the sealing lip (19) protrudes
30 beyond a peak of the spacer (31) at a height (h_2)
axially downwards to a height (h_1).
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4. A screw cap according to Claim 3, characterized in
that the sealing lip (19) defines an inner side face

(25) with a circumferential step (P) forming a pressure edge.

5. A screw cap according to Claim 4, characterized in that the step (P) is located at the same height (h_2) as the peak of the at least one spacer (31) when it is in an unpressurized condition
6. A screw cap according to any one of Claims 1 through 5, characterized in that radially inside of the first spacer (31), a second spacer (35) is formed on the cap bottom.
7. A screw cap according to any one of Claims 1 through 6, characterized in that the cap bottom (3) defines a circular groove (36) radially inside the spacer (31) thus reducing the thickness of the cap bottom (3).
8. A screw cap according to any one of Claims 1 through 6, characterized in that the closure membrane (37) has a greater thickness (d_1) at least in a zone wherein it is contacted by the bottle neck than the thickness (d_2) in a central zone thereof.
9. A screw cap according to any one of Claims 1 through 8, characterized in that the sealing lip (19) is divided into several segments (19').
10. A screw cap according to Claim 9, wherein the segments (19') are formed either by indentations (19'') in the circumferential sealing lip (19) or by separate segments (19') spaced by a length (A) which is the same as or greater than the length (B) of the segments (19').

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